

Application Number 10/026,293

After-final Amendment responsive to final Office Action mailed August 25, 2005

REMARKS

This Amendment is responsive to the Final Office Action dated August 25, 2005. Applicant has amended claims 1, 16, 26, 28, 33, 37 and 39; and canceled claim 21. Claims 1-4, 6-12, 16, 18, 19, 22, 26-29 and 31-39 are now pending.

Entry of the after-final Amendment

Applicant respectfully requests entry of this after-final Amendment, and full consideration of the following comments. The Amendment does not raise any new issues, and does not require the Examiner to perform any additional search.

All pending independent claims have been amended to clarify that a digital camera captures the image, which includes the text that is translated. This claim amendment is being submitted in order to address concerns advanced by the Examiner in the final Office Action. However, this feature was formerly recited in claim 21, which is now canceled. Therefore, since this feature was already presented to the Examiner in former dependent claim 21, the current amendment to the independent claims, to recite this feature, does not raise any new issues.

Secondly, method claims 1, 28 and 37 have been amended to clarify that the respective methods are performed by a device, e.g., a device that includes the digital camera and the display. These features have already been recited in the other independent claims 16, 26 and 33. Therefore, this further clarification to method claims 1, 28 and 37 does not raise any new issues.

Reply to the Examiner's "Response to Arguments"

In the final Office Action, the Examiner noted that Chong (USPN 5,525,120) describes a scanner that scans images, which are then transmitted via a fax/modem. The Examiner indicated that he was not persuaded by Applicant's former arguments that Chong fails to suggest the use of an image capture device to capture an image. In particular, the Examiner indicated that a scanner, as described by Chong, is not distinguishable from an image capture device, as these are one in the same. Applicant thanks the Examiner for clarifying his interpretation of Chong.

In order to clarify the pending claims, and to address the Examiner's apparent concern over the scope of the phrase "image capture device" relative to the facsimile system of Chong, Applicants have amended all independent claims to clarify that the image capture device is a

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digital camera. Thus, all pending claims now require a digital camera that captures an image containing text in a first language. As claimed, the image is then transmitted via a wireless connection, and the device receives a translation of the text in a second language and displays the translation. Again, this feature was formerly recited in claim 21, which is now canceled.

Nothing in Chong is suggestive of these features, and the Nguyen reference (USPN 5,797,089) provides no teaching that would have led a person of ordinary skill in the art to modify the facsimile system of Chong to provide such features. In view of this amendment, Applicant believes that all rejections have been clearly overcome.

Applicant also wishes to comment on the Examiner's assertion in the "Response to Arguments" that Chong teaches the simultaneous display of the un-translated image and the translation. Applicant still disputes whether Chong discloses the simultaneous display of the un-translated image and the translation. However, Applicant also notes that even with the Examiner's interpretation of faxed and printed copies in Chong as somehow being the same as the simultaneous display of un-translated image and the translation, claim 18 specifically recites a display of a device that performs such simultaneous display of un-translated image and the translation. No interpretation of a faxed and printed copies could be even remotely suggestive of the display recited in claim 18.

Applicant respectfully submits that several problems exist in the rejections of claims 16, 18, 19, 22, 26-29 and 31-39, due to the fact that the Examiner is improperly basing the rejections of all independent claims under the same rationale as the rejection advanced for claim 1, even though the various independent claims recite different features. This issue is further discussed below.

Claim Objections

In the final Office Action, the Examiner objected to claim 39 based on an informality. In response, claim 39 has been amended to address the informality. Applicant believes that the claim objection has been overcome via this amendment to claim 39.

Rejections Under 35 U.S.C. § 112

In the Final Office Action, the Examiner rejected claims 28 and 33 under 35 U.S.C. 112,

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first paragraph, as failing to comply with the written description requirement. The Examiner indicated that Applicant's specification does not disclose the features of these claims that recite the generation of a second image from a first image, wherein generating the second image includes editing out one or more portions of the first image that do not include the text.

Applicant respectfully traverse this rejection. Applicant's disclosure provides clear support for the features of claims 28 and 33 that would have conveyed that Applicant had possession of the claimed invention at the time the application was filed. As an example, Applicants direct the Examiner to FIGS. 3 and 4, and the corresponding disclosure at page 7, lines 17-27 of the application. In this section, Applicants specify:

FIG. 3 is an exemplary user interface on client device 30, such as display device 22, following capture of an image 60. Image 60 includes text of interest 62 and other extraneous material 64, such as other text, a picture of a sign, and the environment around the sign. The extraneous material is not of immediate interest to the user, and may delay or interfere with the translation of text of interest 62. The user may edit image 60 to isolate text of interest 62 by, for example, tracing a loop 66 around text of interest 62. Client device 30 edits the image to show the selected text 62.

FIG. 4 is an exemplary user interface on client device 30 following editing of image 60. Edited image 70 includes text of interest 62, without the extraneous material. Edited image 70 may also include an enlarged version of text of interest 62, and may have altered contrast or brightness to improve readability.

Based on this passage, it is clear that Applicant had possession of the features recited in claims 28 and 33 at the time the application was filed. In particular, this passage provides clear support of the feature that requires generation of the second image to include editing out one or more portions of the first image that do not include the text. Applicant respectfully requests withdrawal of the rejections of claims 28 and 33 under 35 U.S.C. 112, first paragraph.

Rejections Under 35 U.S.C. § 103

In the final Office Action, the Examiner rejected claims 1-4, 6-12, 16, 18, 19, 21, 22, 26-29 and 31-39 under 35 U.S.C. § 103(a) as being unpatentable over Chong (USPN 5,525,120) in view of Nguyen (USPN 5,797,089). The Examiner's analysis focused on independent claim 1 and its respective dependent claims, and rejected the remaining claims under the "same rationale."

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As a preliminary observation, as mentioned above, Applicant disputes the Examiner's assertion that claims 16, 18, 19, 21, 22, 26-27, 29, 31, 32 and 34-39 are the same in scope and content as claims 1-12, 28 and 33. As one exemplary distinction between these claims, Applicant notes that system claim 26 recites client device and a remote server including a receiver that receives the image over the network from the client device, a translator that generates the translation of the text in the second language and a transmitter that transmits the translation over the network to the client device. While method claim 1 and device claim 16 recite devices that are analogous to the client device recited in claim 26, neither of claims 1 or 16 recite the remote server that is required by claim 26. Thus, it appears that the Examiner has not addressed the features of claim 26 that require a remote server including a receiver that receives the image over the network from the client device, a translator that generates the translation of the text in the second language and a transmitter that transmits the translation over the network to the client device. Applicant notes that other distinctions exist between the different independent claims.

In any case, as noted above, Applicant has amended all pending claims to clarify two points, which should advance the application to immediate allowance and render the other points moot. Again, these amendments do not raise any new issues and do not require any additional search by the Examiner.

First, Applicant has amended all pending claims to clarify that a digital camera captures the image, which includes the text that is translated. In the final Office Action, the Examiner noted that the phrase formerly used in Applicant's claims, "image capture device," was the same as the "scanner" used by Chong. The current amendment clarify that a digital camera captures the image, and should more clearly distinguish the claims from the scanner of Chong and the facsimile system implemented by Chong.

Second, method claims 1, 28 and 37 have been amended to clarify that the respective methods are performed by a device, e.g., a device that includes the digital camera and the display. The other independent claims, claim 16, 26 and 33, already required these features. Applicant notes that nothing in Chong or Nguyen is even remotely suggestive of a device that comprises a digital camera that captures an image containing text in a first language, a transmitter that transmits the image over a network via a wireless connection so that the text can

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be translated by a different device, a receiver that receives a translation of the text in a second language over the network via the wireless connection, and a display that displays the translation of the text in the second language. In view of this further clarification of the claims, Applicant requests reconsideration by the Examiner and allowance of all pending claims.

Independent claim 1 recites a method comprising capturing an image containing text in a first language with a digital camera of a device, establishing with the device a wireless connection with a network, transmitting the image containing text in the first language from the device over the network via the wireless connection, receiving at the device a translation of the text in a second language over the network via the wireless connection, and displaying at the device the translation of the text in the second language.

Independent claim 16 recites a device comprising a digital camera that captures an image containing text in a first language, a transmitter that transmits the image over a network via a wireless connection so that the text can be translated by a different device, a receiver that receives a translation of the text in a second language over the network via the wireless connection, and a display that displays the translation of the text in the second language.

Independent claim 26 recites a system comprising a client device and a remote server. The client device includes a digital camera that captures an image containing text in a first language, a client transmitter that transmits the image over a network to a remote server via a wireless connection so that the text can be translated by the remote server, a client receiver that receives a translation of the text in a second language over the network from the remote server via the wireless connection, and a display that displays the translation of the text in the second language. The remote server includes a receiver that receives the image over the network from the client device, a translator that generates the translation of the text in the second language and a transmitter that transmits the translation over the network to the client device.

Independent claim 28 recites a method comprising capturing a first image containing text in a first language with a digital camera of a device, generating from the first image a second image containing the text in response to a command from a user, wherein generating the second image includes editing out one or more portions of the first image that do not include the text, transmitting the second image from the device over a network so that the text can be translated,

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receiving at the device a translation of the text in a second language over the network, and displaying at the device the second image and the translation.

Independent claim 33 recites a device comprising a digital camera that captures an image containing text in a first language, a controller that edits the image in response to commands of a user to edit out one or more portions of the first image that do not include the text, a transmitter that transmits the edited image over a network so that the text can be translated by another device, a receiver that receives a translation of the text in a second language over the network, and an output device that presents the translation to the user.

Independent claim 37 recites a method comprising capturing an image containing text in a first language with a digital camera of a device, transmitting the image containing text in a first language from the device over a network so that the text can be translated, receiving at the device a translation of the text in a second language over the network, and displaying the image and the translation simultaneously at the device.

Applicant respectfully traverses all of the rejections under 35 U.S.C. § 103 to the extent such rejections may be considered applicable to the claims as amended herein. The applied references fail to disclose or suggest the inventions defined by Applicant's claims, and provide no teaching that would have suggested the desirability of modification to arrive at the claimed invention.

The Chong reference describes a machine translation and telecommunications system that is very different than the techniques and devices recited in Applicant's claims. In Chong, a computer server 10 receives image data via a facsimile transmission or a conventional page scanner. The server 10 performs a translation of the facsimile transmission, and then uses output module 30 to transmit translated text to a recipient via a return facsimile transmission.

Nothing in Chong suggests the use of a digital camera to capture an image that includes text, nor the transmission of such an image. Any teaching of the use of a digital camera to capture an image that includes text to be translated is completely lacking from Chong. Moreover, even if the scanner of Chong could be construed as an "image capture device," no reasonable construction of the scanner of Chong could be considered similar to a digital camera, as now required by the independent claims.

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For example, a facsimile transmission, as used by Chong, is very different and more cumbersome than the transmission of a captured image from a digital camera. In particular, a facsimile transmission involves scanning at a sending device, data transmission, and subsequent printout at the receive device. The transmission of a digitally captured image, captured using a digital camera, in contrast, does not require the scanning or printout needed in a conventional facsimile transmission.

Moreover, nothing in Chong suggests the reception and display of the translation. Instead, in Chong, the translation is sent via a return facsimile transmission. Accordingly, the translation is not displayed in Chong. All claims now clarify that the display occurs "at the device," and Applicants again note that the device claims (such as claim 16) specifically require a display that displays the translation, which is clearly different than a translation being sent via a return facsimile transmission, as described by Chong.

The Nguyen reference lacks any teaching that would have led a person of ordinary skill in the art to modify the system of Chong to replace the facsimile transmission of the Chong system with digital camera and image transmission. Nguyen appears to describe nothing more than a conventional personal digital assistant (PDA) connected to a mobile telephone unit.

In the final Office Action, the Examiner clarified that the Nguyen reference was being cited simply for the proposition that wireless communication is known. In any case, Applicant reiterates that Nguyen has absolutely no relevance to image translation systems. For example, nothing in Nguyen suggests that the PDA can capture an image of text, transmit the image to a server for translation, and receive a translation from the server, as required by Applicant's claims. These features are simply lacking from Nguyen. Therefore, Applicant fails to see the relevance of Nguyen. While Nguyen may establish the proposition that wireless communication was known, it teaches nothing about the specific type of wireless communication required by Applicant's claims, i.e., the transmission of the image to a server for translation, and reception of a translation from the server.

In summary, Applicant's pending claims have been amended to clarify that the claimed device includes a digital camera to capture an image including text in a first language, transmitter to transmit the image to another device over a network so that the other device can translate the text, a receiver to receive a translation of the text in a second language, and a display to present

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the translation to a user. All claims have also been clarified to more clearly specify that these structural and functional limitations apply with respect to a device, e.g., such as a wireless communication device or PDA. Nothing in any of the applied references is even remotely suggestive of a device that includes these features and functionality.

As noted previously, the claimed invention may be particularly useful with hand-held computers or cellular telephones that include integrated digital cameras. In this case, a user may capture an image of an unknown text of a foreign language. The device can then transmit the image to a remote server so that the text can be translated. In this manner, separating the translation from the displaying device is highly desirable as the server may be better equipped to perform the translation insofar as translation may require significant processing power that may be lacking in the device that captures the image. In this case, a server can perform the translation and transmit the translation back to the device for presentation to the user. This client-server communication may appear seamless to the user as though the device (rather than the server) performed the translation.

Conclusion

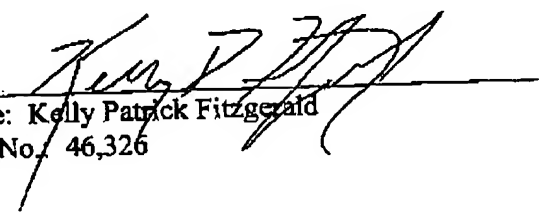
All claims in this application are in condition for allowance. Applicant respectfully requests reconsideration and prompt allowance of all pending claims. Applicant reserves further comment at this time with regard to the various other features recited in independent and dependent claims. However, Applicant does not acquiesce to any of the Examiner's rejections or characterizations of the prior art. Applicant reserves the right to present additional arguments.

Please charge any additional fees or credit any overpayment to deposit account number 50-1778. The Examiner is invited to telephone the below-signed attorney to discuss this application.

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